Wisconsin Department of Natural Resources 2004-2005 Snowmobile Enforcement & Safety Report





Produced by the Bureau of Law Enforcement, Recreation Enforcement and Education Section PUB-LE-203 2005



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Department of Natural Resources

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State of Wisconsin Department of Natural Resources Bureau of Law Enforcement

2004-2005 Snowmobile Program Report Summary

The 2004-2005 Snowmobile Program Report was compiled from the 37 fatal investigations and other data collected during the fiscal year 2003-2004 (a fiscal year runs from July 1 – June 30).

Conservation Wardens investigate all fatal snowmobile incidents and as such, Wisconsin law requires that a conservation warden or law enforcement officer be notified immediately of any snowmobile incident that results in an injury requiring medical treatment by a physician. In addition, the operator(s) involved in these reportable incidents must file a written report with the Department of Natural Resources within 10 days, in so far as they are capable of doing so.

FATAL INCIDENT CAUSES

The primary type of crash causing the victim's death continues to be striking a fixed object such as trees or ice/rock. The secondary type of crash leading to the victim's death this reporting period was falling through the ice, with collision with another snowmobile or truck. The leading contributing factors were alcohol and excessive speed.

There were 27 (12 the previous year) fatal crashes that investigators directly identified speed as a contributing factor to the death of the operator/passenger. Of the 27 speed related fatals, 19 of those that died had consumed alcohol or 75% (75% the previous year) of the speed related victims.

Alcohol was identified as another major contributing factor. The 2003-04 laws expressly stated a person is under the influence of alcohol once their blood alcohol level reaches 0.08; however, for the purposes of this report, any alcohol level identified in the coroner's report (by percent) is considered to be a contributing factor.

Seventy-three percent (27 of the victims) of the known toxicology reports performed show alcohol was consumed by the victim. Toxicology examinations were not performed on two victims; eight victims had no alcohol present. A review of the alcohol involved fatals show that no victims had less than 0.03 alcohol levels. Five percent of the victims that consumed alcohol showed levels less than .08%. Thirty-Two percent of the victims that consumed alcohol had levels from 0.08 to 0.199%. The other thirty-two percent of the alcohol related victims were reported at 0.20 or above, with one victim result at 0.271.

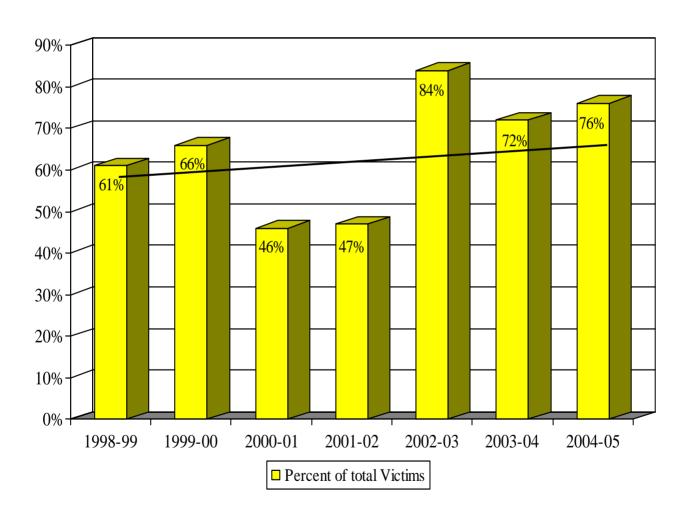
WHO WAS INVOLVED

Thirty-four of the 37 victims were male. Victim ages ranged from 5-66 years, with the average age 33.7 years old; last season's average age was 35.2 years. The largest percentage of victims was age 30-39 years with 35%. The second largest age group was age 21-29 years at 22%. Three children under 16 were killed this reporting period. Of the 37 fatal incidents, 30 of the victims were Wisconsin residents while 3 were from Illinois, 2 from Minnesota, and 1 from Iowa. The majority of the victims (22) had not received Wisconsin Snowmobile Safety Training. Of the 37 victims, 34 were known to have been wearing a helmet, 3 were not wearing a helmet.

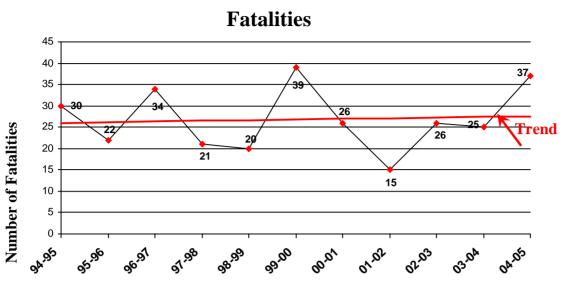
WHEN DO THE FATAL INCIDENTS OCCUR

A correlation was observed by reviewing fatality statistics for the past ten years. Inferences can be drawn as to the time of day and the day of the week that fatal incidents are most likely to occur. Statistics show the majority of the snowmobilers were fatally injured on Friday, Saturday or Sunday. Saturdays show a higher number of victims over any other day. The time of day/night that snowmobilers are most likely to be involved in a deadly incident is between the hours of 7:00 pm - 3:00 am.

Percent of Victims Killed Showing Alcohol as a Contributing Factor

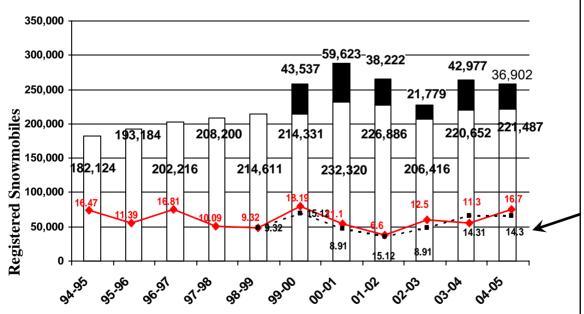


History of Snowmobile



The 11-year fatal average is 26.8 deaths per year.

Snowmobile Fatality Rate to Number of Snowmobiles Registered



Beginning the 1999-2000 season, the nonresident trail pass became required for all snowmobiles not registered in WI and as a result the Department was able to identify the number of nonresident snowmobiles operated in WI.

Fatals per 100,000 Registrations.

Resident fatals/100,000
 Resident Registrations
 ■ Nonresident Trail Passes

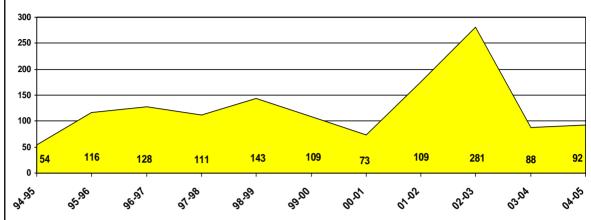
History of Newly Recruited Snowmobile Education Instructors

The total number of active instructors for 2004-2005 was 1,066.

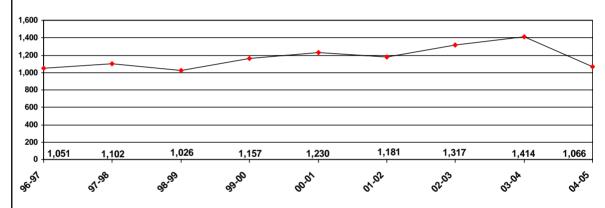
The number of active instructs in 2002/2003 is up do to a push to activate new instructors largely with the help of the Association of WI Snowmobile Clubs.

Over 246,618 students have been certified by volunteer instructors.

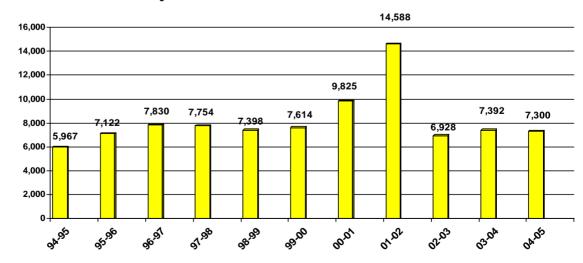
Certification requires a student to complete a basic Wisconsin snowmobile training course. Course content includes: knowing your snowmobile. maintenance and repair, riding, personal safety, winter survival, laws, courtesy and ethics.



History of Active Snowmobile Instructors



History of Certified Snowmobile Students



2004-2005 Alcohol Involved Snowmobile Fatals

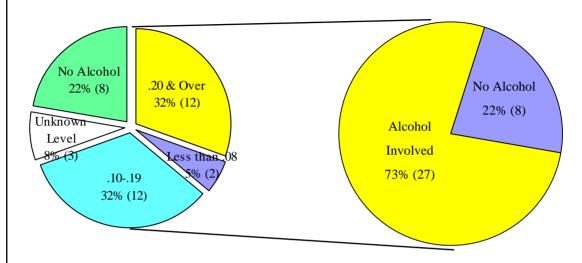
2004-2005, the average blood alcohol level for all victims was 0.112.

One of the "Unknown Levels" was the operator of 1 of the snowmobiles and his BAC is unknown.

The 2004-2005 season showed that alcohol was a contributing factor in 76% of all fatals.

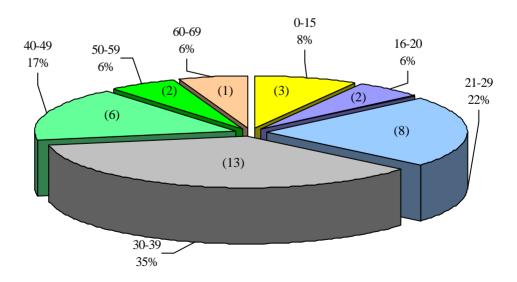
Twenty-four of the 37 victims were male.

The average age for the victims killed was 33.7 years old as compared to 35.2 years in 2003-2004.

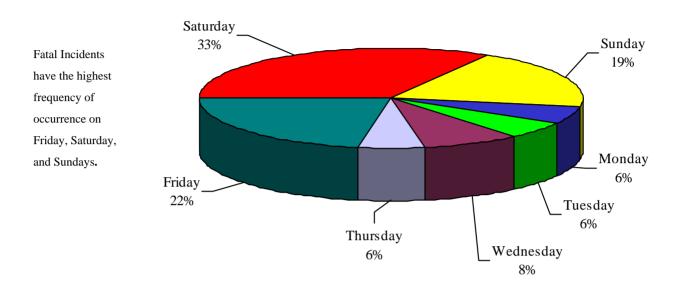


- Numbers in () represents number of victims.
- Blood alcohol content is grams/ml.

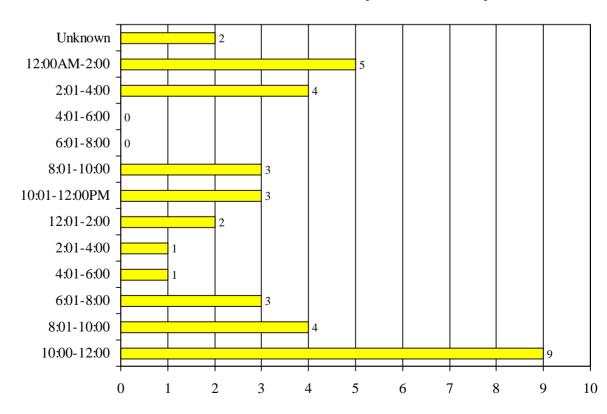
2004-2005 Age of Snowmobile Fatality Victims



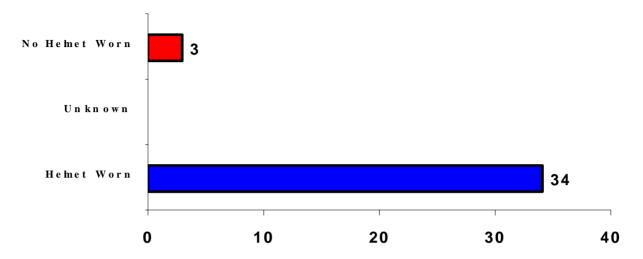
2004-2005 Snowmobile Fatal Incidents by Day of Week



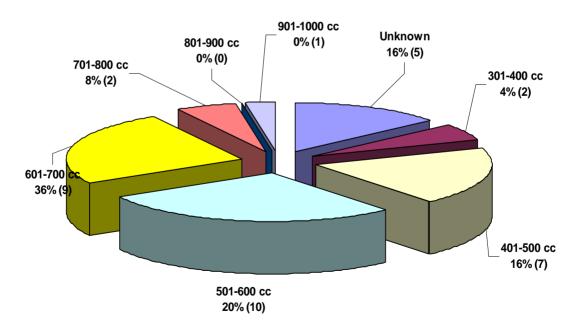
2004-2005 Snowmobile Fatal Incident by Time of Day



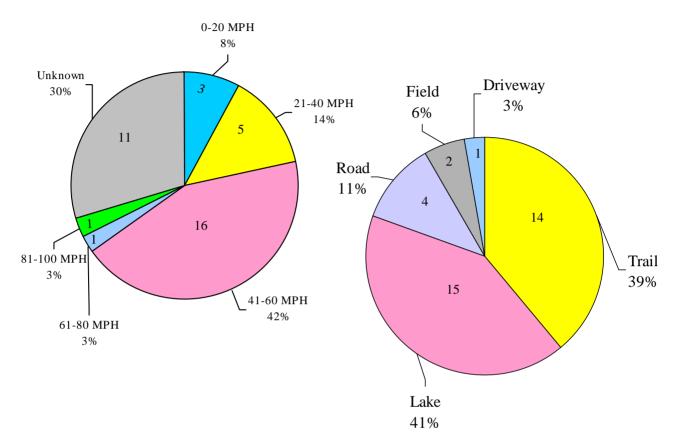
2004-2005 Fatal Snowmobile
Victim Helmet Use



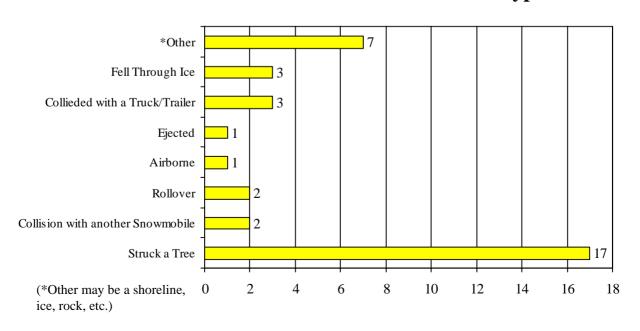
2004-2005 Snowmobile Engine Displacement for Machines Involved in Fatal Snowmobile Incidents



2004-2005 Fatal Snowmobile Incidents Speed and Location at Time of Incident



2004-2005 Fatal Snowmobile Incidents Type



2004-2005 Studded Snowmobile Track

Fatality Victim's Use

A survey of snowmobilers conducted in October 2001 indicates that 46.6% of the surveyed snowmobilers used studded

25

0

Studded Track

Source - Governor's Snowmobile Recreation Council, 10-12-01

tracks.

20 15 10 5

Beginning January 1, 2001, a Snowmobile Safety Certificate became required for all operators born on or after January 1, 1985.

2004-2005 Fatal Snowmobile Victim Operators with Wisconsin DNR Safety Training Certification

Unstudded Track

Unknown Stud Use -Victom Only



2004-2005 Citations Issued for Snowmobile Violations

Total Citations	**644
Operate Snowmobile w/o Valid Registration (S-1)	106
Highway and Roadway Violations (S-12)	
Fail to or Improper Display of Registration Number or Decal (S-2)	
Operate w/o Trail Use Sticker (S-33).	
Fail to Comply with Regulatory Signs (S-35)	
Operate Snowmobile w/o Possession of Valid Certificate (S-3)	
Operate at/in Unreasonable, Improper or Careless Speed/manner (S-17)	
Trespass 'Sec. 350.10(6) through (13) Wis. Stats.' (S-19)	
Operate Snowmobile that Makes Excessive or Unusual Noise (S-28)	
Operate Snowmobile while Intoxicated (S-24)	
Operate in Prohibited Area on Lands Controlled by DNR (S-11)	22
Give Permission to Operate a Snowmobile not Registered (S-5)	21
Permit Operation by Person Incapable Because	
of Age, Physical or Mental Disability (S-15)	
Operate Snowmobile with Alcohol Concentration Above .1% (S-25)	19
Fail to Transfer Registration of Snowmobile (S-4)	
Operate snowmobile w/o proof of training certificate (S-36)	
Operate (Manufacture or Seller) Snowmobile w/o Functioning Muffler (S-34)	
Transport Uncased Strung Bow on a Snowmobile (S-09)	
Fail to Report Snowmobile Accident (S-16)	
Fail to Display Lights when Required (S-18)	
Miscellaneous (S-20)	
Fail to Stop for Law Enforcement Officer (S-22)	
Operate Snowmobile w/o Muffler on Engine (S-29)	
Shoot From a Snowmobile (S-10)	
Equipment Violation (S-14)	
Dealer Failing to Collect Fee & Submit Registration Applications (S-21)	
Refuse to Take Intoxicated Snowmobile Test (S-26)	
Absolute Sobriety for Persons Under 19 (S-27)	
Fail to Render Aid (S-23)	
Cause Injury by Intovicated Operation of Snowmobile (\$-30)	0

^{**}The Department has not received the dispositions of all arrests from the court system for this snowmobiling season. The report reflects lower numbers than actual arrest.

Wisconsin Snowmobile Fatality Summary – 2004/2005 Season

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified / Helmet
1.	12/17/04	Lincoln County	Struck a tree	27	.217	Yes
	23:45	Town of Bardley (Trail)	Abdominal & Internal Injuries / Cardiac Arrhythmia / Alcohol	Male	WI	Yes

The victim was following another snowmobile approx 40 mph on the trail. The victims companion turned to go to a tavern and then heard a loud crash behind him. When he returned he found the victim had went off the trail and it appears that the ski of the victim's snowmobile struck a tree and ejected him.

2. & 3.	12/26/04	Sauk County	Struck a cable	Victim #1 – 29. Victim #1 – 30	Victim #1230. Victim #1165	Victim #1 – No. Victim #2 – No
	19:20	Town of Merrimac (Lake)	Neck & Head Injuries / Speed / Alcohol	Both victims:	Both victims: WI	Both victims: Yes

This incident involved two separate snowmobile operators who were riding in close proximity. Both operators struck a cable used to mark an area of open water on the lake at a warm water discharge and were ejected from their snowmobiles. The cable was stretched out from the shore and also had reflective markings on them.

4.	12/31/04	Racine County	Fell through ice.	30	.000	No
	09:58	Town of Burlington (Lake)	Hypothermia / Drowning / Controlled Substance	Male	WI	Yes

The victim was seen traveling across the lake when he went near the center of the lake and had gone through the ice.

5.	1/2/05	Burnett County	Struck a trailer.	44	.241	No
	20:30	Town of Oakland (Lake)	Head & Chest Injuries / Alcohol / Speed	Male	WI	No

The victim was traveling on the lake without headlights and struck a trailer that was attached to a truck that was parked on the ice.

6.	1/6/05	Chippewa County	Fell through ice.	41	.172	No
	Approx. 03:00	Town of Birch Creek (Lake)	Hypothermia / Drowning / Alcohol	Male	WI	Yes

The victim was last seen on the lake and reported missing by his grandmother the next day. The victim and his snowmobile went through the ice near open water and both became submerged.

			Type & Cause of death -	Age/	BAC/	Safety
#	Date	Location	Primary/Secondary	Sex	Residency	Certified
7.	1/6/05	Waukesha County	Struck a tree.	42	.036	Yes
	Between	Town of Eagle	Multiple Traumatic			
	24:00-	Town of Eagle (Road)	Injuries / Alcohol & Drugs	Male	WI	Yes
	03:00	(Koau)	/ Speed			

Evidence at the scene indicated that the victim's snowmobile right ski hooked on a 4 inch scrub oak at which point the snowmobile spun. The victim appears to have continued on where he collided with an oak tree.

8.	1/7/05	Douglas County	Struck a downed log / stumps.	32	.086	No
	23:15	Town of Gordon (Road)	Speed / Alcohol / Multiple blunt force head trauma	Male	MN	Yes

The victim passed three others in his group traveling approx. 50 mph when he went straight at a curve in the road going into a brushy area with small popple trees. The victim then hit a downed log and then a stump in quick succession and became airborne and separated from his snowmobile.

9.	1/7/05	Jefferson County	Struck a tree.	38	.248	No
	22:45	Town of Lake Mills	Alcohol / Speed / Massive	Male	WI	Yes
		(Trail)	Head, Neck & Chest			
			Trauma			

The victim was in the lead and failed to manipulate a turn colliding with a tree that was in the fence line straight ahead in the curve.

10.	1/8/05	Iron County	Collided with a truck.	27	.075	Yes
	24:34	Town of Knight (Lake)	Multiple Traumatic Injuries / Alcohol	Male	WI	Yes

The victim collided with a truck on Island Lake.

11.	1/8/05	Jefferson County	Struck a tree.	36	.237	No
	02:40	Town of Lake Mills (Trail)	Alcohol / Speed / Massive Neck & Body Trauma	Male	WI	Yes

The victim drove off the side of the trail and collided with several trees at a high rate of speed.

12.	1/12/05	Oneida County	Collision with a island / tree.	38	.240	No
	23:45	Town of Pelican (Lake)	Speed / Alcohol / Trauma / Impact Injury	Female	WI	Yes

The victim was last seen leaving a party on 1/12/05 and was found by a fisherman on 1/15/05. It appears the victim was traveling at a high rate of speed before hitting an island and going airborne for 36 feet before striking a large tree.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
13.	1/14/05	Vilas County	Fell from Machine / Collision with a tree	34	.100	Yes
	22:51	Town of Conover (Trail0	Speed / Head Trauma / Alcohol	Male	WI	Yes

The victim, while in a curve on the snowmobile trail, drove his snowmobile off the trail hitting soft snow causing the victim to fall off his snowmobile and strike a tree.

14.	1/15/05	Kenosha County	Ejected	5	.000	No
	15:15	Town of Wheatland (Field)	Inexperience / Trauma / Impact Injury	Female	IL	No

The victim was a passenger riding in front of the operator. The operator of the snowmobile was operating the snowmobile less than 15 or 20 mph across some ice that had formed from water which collected in a depression in a field. As the snowmobile crossed the ice, the back of the snowmobile started to slide sideways and when the snowmobile hit the dry ground the passenger and operator were ejected from the snowmobile.

15.	1/19/05	Forest County	Collision with another snowmobile.	19	.000	Yes
	14:14	Town of Crandon (Field)	Speed / Impact Injury	Male	WI	Yes

The victim and another snowmobile were jumping their snowmobiles on a steep hill and it appears that the other snowmobiler jumped the hill and landed on top of the victim who was coming up the hill from the opposite side.

16.	1/21/05	Price County	Struck a tree.	42	.275	No
	19:30	Town of Ogema (Trail)	High Speed / Poor Visibility / Head Injury / Alcohol	Male	WI	Yes

The victim was out during a major snowstorm traveling on a long straight stretch of the trail, went off the trail, struck a hump and then both the snowmobile and victim struck a tree.

17.	1/23/05	Marinette County	Struck a tree.	48	.196	No
	13:22	Town of Beecher (Trail)	High Speed / Alcohol / Trauma to Head	Male	WI	Yes

The victim was found by an unrelated passing snowmobile party and upon investigation it appears that the victim was traveling at a high rate of speed and lost control at a slight bend in the trail striking a tree.

#	Date	Location	Type & Cause of death – Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
18.	1/25/05	Vilas County	Roll over / Struck by another snowmobile	39	.000	Yes
	17:55	Town of Boulder (Lake)	Speed / Lost Control / Neck & Internal Injuries	Male	WI	Yes

The victim was traveling across the lake in the middle of 6 other snowmobilers when he lost control and rolled over twice. The snowmobile just behind him swerved to avoid striking the snowmobile and hit the victim.

19.	2/5/05	Oneida County	Struck trees / refrigerator/freezer	36	.206	No
	23:33	Town of Cassian (Lake/Yard)	Speed / Alcohol	Male	WI	No

The victim was traveling at a fast speed on the ice, headed back towards the cabin and appeared to have driven over a depression on the shoreline. The outer edge of the snowmobiles left ski struck a tree changing the direction of the machine which then struck a second tree. The victim was ejected from the snowmobile went airborne through an open service door of the basement and struck a side-by-side refrigerator/freezer.

20.	2/16/05	Oneida County	Roll Over	64	.240	No
	23:30	Town of Cassian (Trail)	Alcohol / Drowning	Male	WI	Yes

The victim was traveling approx. 25 mph when he failed to negotiate a turn and went straight off the trail. The snowmobile went into a ditch that had water in it and rolled on it's side trapping the victim underneath it.

21.	2/19/05	Adams County	Struck a fixed object.	52	.156	?
	18:30	Town of Rom (Lake)	Alcohol / Inexperience / Neck & Head Injuries / Speed	Male	WI	Yes

The victim was traveling on a channel and failed to completely negotiate a corner, came up on the shoreline with the sled, and struck a pier.

22.	2/21/05	Oconto County	Went airborne	24	.109	Yes
	22:30	Town of Stiles (Road)	Alcohol / Speed / Chest Trauma	Male	WI	Yes

The victim, traveling approx. 70 mph, went around several road closed barricades on a newly constructed bypass, not open to the public and not paved, and went airborne dropping several feet. The victim was ejected from the sled. Relation picked him up and drove him home where he later went to the hospital and passed away.

23.	2/26/05	Forest County	Struck a tree	17	.118	No
	12:05	Town of Blackwell (Trail)	Speed / Inexperience / Alcohol / Trauma Impact Injury	Male	IL	Yes

The victim appeared to have began to leave the groomed portion of the trail to the right and took corrective measures narrowly missing two trees. As the victim turned left to return to the groomed portion of the trail, he appeared to have been thrown from the machine, striking a tree.

#	Date	Location	Type & Cause of death - Primary/Secondary	U	BAC/ Residency	Safety Certified
24.	2/26/05	Vilas County	Struck another Snowmobile	50	.000	No
	22:50	Town of Saint Germain (Lake)	Speed / Alcohol / Head Injuries	Male	IL	Yes

The victim was traveling across the lake at approximately 60 mph when he collided head on with another snowmobile. The operator of the other snowmobile had been drinking and had a BAC of .057.

25.	2/27/05	Forest County	Struck a Tree	37	.184	Yes
	12:12	Town of Laona (Trail)	Speed / Alcohol / Trauma Impact Injury	Male	WI	Yes

The victim was operating his snowmobile on a trail and evidence indicates that he was traveling at a high rate of speed and failed to negotiate a turn. The machine traveled a distance of about 206 feet after leaving the trail before striking a tree.

26.	2/27/05	Vilas County	Hit Shoreline / Steep Bank	23	.106	Yes
	03:15	Town of Presque Isle (Lake)	Speed / Alcohol / Internal Trauma / Impact Injuries	Male	WI	Yes

The operator of the snowmobile was traveling at a high rate of speed across the lake and hit the shoreline. The operator and passenger / victim were ejected from the snowmobile. The operator was severely injured, the passenger died at the scene.

27.	2/28/05	Bayfield County	Struck a Tree	61	.000	No
	11:00	Town of Grand View (Trail)	Head & neck Injuries / Speed / Trail Conditions / Reaction to edge of trail	Male	IA	Yes

According to witnesses the victim was traveling down a snowmobile trail when one of the skis on the snowmobile caught in the heavy snow and it pulled the victim into a tree.

28.	3/4/05	Sawyer County	Struck a fixed object/tree	42	.160	No
	20:52	Town of Bass Lake	Speed / Alcohol / Internal & Impact	Male	MN	Yes

The victim was found lying against a tree along the shoreline of Gindstone Lake. The victim appears to have been thrown from the snowmobile as it hit the embankment and into a tree several feet up on shore.

29.	3/5/05	Bayfield County	Struck Shoreline	25	.143	?
	02:00	Town of Namakagon	Extensive Head & Body Injuries /	Male	MNI	Yes
	02.00	(Lake)	Alcohol / Speed / Inexperience	Male	IVIIN	168

The snowmobile was driven into a point of land that extended out onto Lake Namakagon and struck a tree and rock along the shoreline.

30.	3/5/05	Vilas County	Struck a Tree.	33	.230	No
	Between 03:00 & 04:00	Town of Manitowish Waters (Trail)	Head Injuries / Speed / Alcohol	Male	WI	Yes

The victim went straight at a curve and hit a large tree approximately 10-15 feet off the side of the trail.

#	Date	Location	Type & Cause of death - Primary/Secondary	Age/ Sex	BAC/ Residency	Safety Certified
31.	3/5/05	Oconto County	Collision with a Tree.	24	.000	Yes
	09:56	Town of Townsend (Road)	Speed / Head & Chest Trauma	Female	WI	Yes

Oconto County Sheriff's office reported a possible snowmobile fatality. It appeared that the victim was the second snowmobile in a party of six snowmobiles. On a gradual curve, the victim and snowmobile left the trail and struck a tree on the south side of the trail.

32.	3/6/05	Iron County	Struck a Tree	26	.223	Yes
	08:40	Town of Oma (Trail)	Multiple Trauma Injuries to Head & Chest / Alcohol / Speed	Male	WI	Yes

The victim was traveling south on a trail and his snowmobile left the trail and hit a tree.

33.	3/12/05	Barron County	Struck a Tree	14	.000	Yes
	11:11	Town of Oak Grove	Head & Chest Trauma / Internal	Male	WI	Yes
	11.11	(Trail)	Injuries / Speed	Maie	VV 1	1 es

The victim veered off the trail and did not lock the brakes up until shortly before impact. Locking the brakes shortly before impact caused the machine to skid sideways (fishtail), striking a tree with the right forward part of the cowling and not directly head on.

34.	3/13/05	Forest County	Fell Through Ice	38	.271	Yes
	01:00	Town of Nashville	Hypothermia / Alcohol	Male	WI	Yes

The victim was reported missing and upon investigation was found to have struck the side of a fence marked with flags and reflectors marking open water created by an aeration system. It appears the victim continued through the fence to the open water where the victim was later found.

35.	3/19/05	Waushara County Village of	Collisin with a Truck	11	.000	No
	22:10	Springwater (Driveway)	Speed / Alcohol	Male	WI	Yes

The victim was a passenger on a snowmobile with his father and brother. The father was the operator of the snowmobile and noted lights of an oncoming vehicle in the driveway. The operator turned the snowmobile sideways just prior to impact throwing all three from the snowmobile. Alcohol was a factor with the operator in the incident.

36.	3/19/05	Brown County	Struck a chunk of concrete	33	NA	No
	21:10	Village of Suamico	Speed / Unfamiliar with the area.	Male	WI	Yes

The victim was traveling on the frozen water at about 60 mph when he struck a large chunk of concrete that was sticking out above the snow and ice. The operator was wearing a helmet but the chin strap was not fastened ans was torn from the victims head. The victim was in the hospital with head and internal injuries and passed away on 3/24/05.

37.	3/29/05	Iron County	Collision with fixed object.	39	NA	No
	23:00	Town of Knight (Route)	Speed / ?	Male	WI	Yes

The victim struck a tree.